

applicant regards as the invention. The Office Action stated that 'the term first portion' and 'second portion' were not stated anywhere in the specification.

Applicant's respectfully traverse the Examiner's rejection, and note that Figures 11-15 clearly illustrate the apportionment of the addresses into first portion and second portion as recited in the claims. Although the actual term 'portion' is not used in the specification, Applicants submit that there is adequate support for this term upon review of the figures.

However, Applicant also notes that they have amended the claims to remove the use of these words. For both these reasons, the objection has been overcome and should be withdrawn.

Rejections Under 35 U.S.C. §102 and 35 U.S.C. §103

Claim 1 was rejected under 35 U.S.C. §102(e) as being anticipated by Chintakrindi et al. (U.S. Patent 6,216,519). Claims 2 and 3 were rejected under 35 U.S.C. §103(a) as unpatentable over Chintakrindi et al in view of Ankney et al (U.S. 5,113,499). Claims 4, 5, 7-12, 13-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Chintakrindi in view of Beser (6,189,102) in further view of Belser et al (U.S. 6,151,324). Claim 6 was rejected under 35 U.S.C. §103(a) as being unpatentable over Chintakrindi in view of Peacock (6,381,650). Claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Chintakrindi in view of Belser in further view of Peacock.

References do not teach, describe or suggest limitations of the claimed invention

In an effort to reach allowance on this case, Applicants have amended all independent claims in a manner similar to that of claim 1, namely "...A method for representing

addressing information in a communication system, the method comprising encoding the at least one address using a regular expression and using the regular expression in place of at least one address, *wherein the regular expression is selected from a group consisting of wildcard characters, concatenation characters and operation characters...*”

Thus, Applicant's have removed the language of 'first portion' and 'second portion', and have added further limitations around the definition of the regular expression. No such arrangement as now claimed is shown or suggested in the cited references, either alone or in combination.

For example, Chintakrindi describes writing an IP address into device associated space. No mention is made of the IP address being represented by a 'regular expression' selected from 'wildcard', 'concatenation' or 'operation' characters.

Beser describes a method and apparatus for storing cable modem network addresses and the customer premise equipment network addresses in a table on a cable modem termination system. At column 35, Beser describes associating a unique identifier with each IP address of the customer premise equipment. However, Beser describes an exemplary IP address at column 35, line 67 as "0ef3454.data-over-cable-net" and thus does not describe using a regular expression in place of the address, wherein the regular expression is selected from a group consisting of wildcard, concatenation, or operation characters, as recited in the claims.

Ankney is relied upon as teaching X.121 numeric addresses. At column 11, lines 60-61, that addresses are either mnemonic or X.121 numeric. The definition of mnemonic in Ankney is 'user friendly' at col. 11, line 5. Applicant notes that Ankney neither describes nor suggests the limitation of the independent claims of "...encoding the at least one address using a regular expression and using the regular expression in place of at least one address, *wherein the regular*

expression is selected from a group consisting of wildcard characters, concatenation characters and operation characters...

Belser describes a method and apparatus for connection oriented switching wherein a pre-established path is established between a selected pair of an ingress and egress switch. In one embodiment, the destination address and source address fields of a MAC frame data are replaced with a virtual path which identifies the pre-established path between the ingress and egress switch. The virtual path is defined at column 4 of Belser, lines 40-50, as including "... three portions ... The first portion ... contains the 48-bit MAC address of the egress switch... The second portion 43 contains a 24-bit path identifier ... The third portion 44 contains the lower three bytes ... of the MAC address of the ingress switch..." Such structure neither describes nor suggests "... "...encoding the at least one address using a regular expression and using the regular expression in place of at least one address, *wherein the regular expression is selected from a group consisting of wildcard characters, concatenation characters and operation characters...*" as recited in the independent claims.

Peacock describes a protocol for locating a server program on a workstation that is dynamically allocated an IP address. An exchange of IP addresses is performed between the client and the server, or alternatively DNS is used, whereby names are used rather than IP addresses. Peacock neither describes nor suggests "... "...encoding the at least one address using a regular expression and using the regular expression in place of at least one address, *wherein the regular expression is selected from a group consisting of wildcard characters, concatenation characters and operation characters...*" as recited in the claims.

Applicants note that independent claims 1, 8, 15 and 16 have each been amended to further define 'regular expression', and are patentably distinct over the cited references which

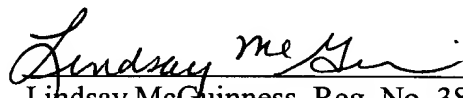
neither describe nor suggest this limitation either in isolation or combination. Accordingly, for this reason, the independent claims and there dependent claims are patentably distinct over the references, and the rejections should be withdrawn.

Applicants have made a diligent effort to place the claims in condition for allowance through the above amendments, and a notice of allowance is respectfully requested. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Lindsay McGuinness, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

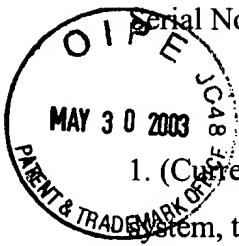
For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date


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CLAIMS

1. (Currently amended) A method for representing addressing information in a communication system, the method comprising ~~apportioning at least one address into a first portion and a second portion, and encoding the first portion of the at least one address using a regular expression representing an attribute of the addresses first portion of the address and using the regular expression in place of the first portion at least one address, wherein the regular expression is selected from a group consisting of wildcard characters, concatenation characters and operation characters.~~

2. (original) The method of claim 1, wherein the at least one address comprises at least one X.121 address.

3. (previously amended) The method of claim 2, wherein using the regular expression in place of the at least one address comprising storing the regular expression in a first portion of a source address field of an address configuration table.

4. (original) The method of claim 1, wherein the at least one address comprises at least one MAC address.

5. (previously amended) The method of claim 4, wherein using the regular expression in place of the first portion of the at least one address comprises storing the regular expression in a first portion of a source address field of an address configuration table.

6. (previously amended) The method of claim 1, wherein using the regular expression in place of a first portion of the at least one address comprises using the regular expression to specify at least one address of an address pool.

7. (previously amended) The method of claim 1, wherein using the regular expression in place of a first portion of the at least one address comprises storing the regular expression in a management information base.

8. (Currently amended) A network device comprising a storage for storing a regular expression representing at least one address, wherein the regular expression is selected from a group consisting of wildcard characters, concatenation characters and operation characters ~~wherein the at least one address comprises a first portion and a second portion, and wherein the first portion is represented as a regular expression, the regular expression representing an attribute of the first portion of the at least one address.~~

9. (original) The network device of claim 8, wherein the storage comprises an address configuration table.

10. (original) The network device of claim 9, wherein the regular expression defines a source address group.

11. (original) The network device of claim 8, wherein the storage comprises a management information base.

12. (original) The network device of claim 11, wherein the regular expression defines an address pool.

13. (original) The network device of claim 8, wherein the storage comprises a routing table.

14. (original) The network device of claim 11, wherein the regular expression defines a forwarding equivalence class for a routing table entry.

15. (Currently amended) An address configuration table for mapping a plurality of source devices in a source network to a single destination device in a destination network, the address configuration table comprising an address configuration table entry storing an address, the address ~~having a first portion and a second portion, the first portion~~ comprised of a regular expression representing ~~an attribute of a plurality of source device addresses,~~ wherein the regular

expression is selected from a group consisting of wildcard characters, concatenation characters and operation characters.

16. (Currently amended) A management information base comprising a management object for storing ~~an address having a first portion comprising~~ a regular expression representing ~~an attribute of at least one address, and a second portion comprising bits of the at least one address, wherein~~ the regular expression is selected from a group consisting of wildcard characters, operation characters and concatenation characters.